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Teaching and Educational Development Institute

Bloom's taxonomy of educational objectives

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This material is largely drawn from a handout from Dr Robert Kleinsasser (School of Languages and Comparative Cultural Studies, UQ). He acknowledges that the verb lists come from the Washington State Board of Vocational Education. The verb lists will be very useful when you write your own learning goals (which are a kind of educational objective).

Bloom's domains

Three domains:

- cognitive (about knowing)
- affective (about attitudes, feelings)
- psychomotor (about doing)

Formulated by Bloom and coworkers. Cognitive and affective domains were completed and published in the 1950s. Psychomotor was never published, although others have tried. It is arguably a bit out of date (from the mid '50s and at present being re-examined), but helpful.

Cognitive domain

A hierarchy of six levels (the hierarchy is what is most under question at present):

- *knowledge:* the recall of specific items
- *comprehension:* can recall, but can do a little more (e.g. paraphrase, define, discuss to some extent)
- *application:* all of the above, but can take information of an abstract nature and use it in concrete situations
- *analysis:* can break down a communication into its constituent parts, revealing the relationships among them
- *synthesis:* can pull together many disorganised elements or parts so as to form a whole
- *evaluation:* makes judgements about the value of materials or methods.

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TEDI, 1996

Verbs to help in writing objectives in the cognitive domain

knowledge	comprehension	application	analysis	synthesis	evaluation
know define memorise repeat record list recall name relate review tell	restate discuss describe recognise explain express identify locate report operate schedule shop sketch	translate interpret apply employ use demonstrate dramatise practise illustrate criticise diagram inspect debate inventory question relate solve examine	distinguish analyse differentiate appraise calculate experiment test compare contrast create design setup organise manage prepare	compose plan propose design formulate arrange assemble collect construct choose assess estimate measure	judge appraise evaluate rate compare value revise score select

Affective domain

A hierarchy of five levels (the hierarchy is what is most under question at present):

- *receiving:* is willing to notice a particular phenomenon
- *responding:* makes response, at first with compliance, later willingly and with satisfaction
- *valuing:* accepts worth of a thing
- *organisation:* organises values; determines interrelationships; adapts behaviour to value system
- *characterisation:* generalises certain values into controlling tendencies; emphasis on internal consistency; later integrates these into a total philosophy of life or world view.

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Some verbs to help in writing objectives in the affective domain

receiving	responding	valuing	organisation	characterisation
observe be conscious realise be sensitive attend listen discriminate be alert preferassume cooperate contribute volunteer	willing comply obey look engage display practice respond prefer accept devote is loyal to exhibit consider participate extend enrich explore	continuing desire grow feel participate assume reponsibility enable initiate examine	crystallise form judgement relate weigh is realistic judge regulate	ready revise change view approach plan arrive relay examine judge is consistent

Psychomotor domain

The psychomotor domain concerns things students might physically do. Although no taxonomy of this domain was compiled by Bloom and his coworkers, several competing taxonomies have been created over the years since Bloom's original books. The one summarised here is based on work by Harrow [Harrow, A. (1972). *A Taxonomy of the Psychomotor Domain: A Guide for Developing Behavioral Objectives.* New York: McKay], as summarised in Barry, K. and King, L. (1993) *Beginning Teaching.* Wentworth Falls, NSW: Social Science Press.

The levels of this domain are categorised as:

- *reflex:* objectives not usually written at this 'low' level
- *fundamental movements:* applicable mostly to young children (crawl, run, jump, reach, change direction)
- *perceptual abilities:* catch, write, balance, distinguish, manipulate
- *physical abilities:* stop, increase, move quickly, change, react
- *skilled movements:* play, hit, swim, dive, use
- *non-discursive communication:* express, create, mime, design, interpret.

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The last two categories seem likely to be well applicable to programs in the creative and professional areas. Clinical skills such as palpation arguably legitimately qualify as psychomotor skills in the skilled movement category, while painting, drawing and acting, for example, will at least in part fall into the non-discursive communication category.

The psychomotor domain and its relevant verbs and categories have been less well articulated, at all levels of education, than the cognitive and affective domains. However, it is important that you do not ignore objectives in this area should there be relevant skills in your course.

Reference

Bloom, B.S. (Ed.). (1956-1964). Taxonomy of Educational Objectives. New York: David McKay Company Inc.

This reference contains the original two volumes detailing the taxonomies for the cognitive and affective domains (see below).

Note

This material is presented as a source of ideas. It is not intended as the only way to write objectives nor even a completely valid one. Bloom's taxonomy dates from the 1950' and has been under debate ever since.

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